MEMORANDUM FOR RECORD   December 9, 2003
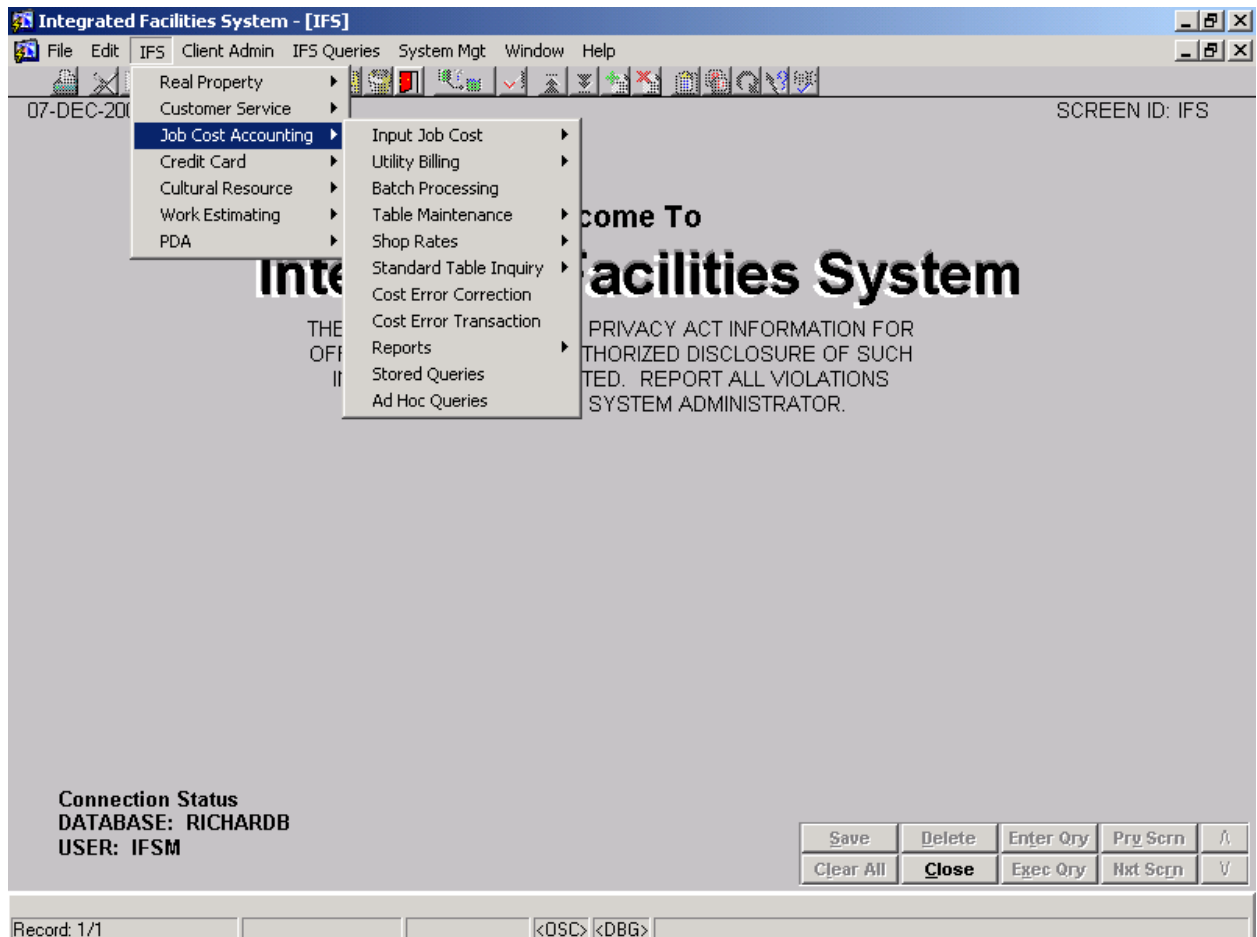
SUBJECT: IFS General requirements and application changes – Job Cost Accting Changes

A08-C10B-xxx   Job Cost Accounting Changes

1. **IFS menu changes (formsdef.mmb, ifsmdef.mmb, ifs.fmb, ifs.pll, ifsolh.pll)**
   a. IFS & Job Cost Accounting Menu

   1) The menu option 'Cost Error Correction' will be added to the Job Cost Accounting menu.
   2) The menu option 'Cost Error Transaction' will be dimmed for sites interfacing with STANFINS or DJAS and for sites with no financial interface (FIN_INTFC = 'S', 'J', or null). The menu option will be enabled for sites running in an SDS or TEAM-UP (to include Kwajelein) interfacing mode (FIN_INTFC = 'D', 'T', or 'K')

2. **Cost File**
   a. IFS will accept and process all types of costs (except depreciation) from a file named COSTFILE, located in the $DATA directory. The file may be produced by the IFS L&E PDA or transferred from other commercial products. The layout of the file is as follows:

Shop Code	1-3
Work Date	4-12
Employee No	13-21
Date Time	22-39
Add/Subtract Ind	40
Customer Id	41-43
Doc Ser No	44-48
FY	49
Doc Type	50
Phase Cd	51-53
Work Status Cd	54-56
Req Installation No	57-61
RPF Installation No	62-66
Facility No	67-71
RPF Partition No	72-74
Fam Housing Qtrs No	75-78
RPF Equipment Id	79-88
Design Use Category Cd	89-96
Component Cd	97-98
Task Cd	99-102
Task Unit	103-105
Military Pay Grade	106-107
Type Labor Cd	108-109
Labor Hours/Tenths	110-114
Tech Data Cost Elm Cd	115
Expensed Amt	116-125
Trans Date	126-134
MS Equipment Id	135-138
Equipment Hrs/Tenths	139-143
Elm Resource Name	144-158

3. **Cost File Process (akjmrp.sh, akjsnp.sql (new), AKJR61.pc)**
   a. The Cost File Process may be invoked via the Cost Error Correction screen.
   b. When invoked, the records from the COSTFILE file in $DATA will be loaded to the COST_FILE table. All records, to include those in COST_FILE which previously had errors, will be processed.
   c. Whenever an error is detected, the record will be flagged as an error and will remain in the COST_FILE table. The first error encountered will reject the record, preventing any additional processing. The Error Date will be set to the current date (without time), and the Error Number will be set to the maximum Error Number plus 1. The record can then be corrected/deleted via the Cost Error Correction Screen (see below).

d. For each record in the cost file, the following processing will occur.
1) If any parts of the Document Number exist, but not all parts exist, produce an error.
2) If the Document Number exists, validate as follows:
   a) If Doc Type equals 'R' and Phase Cd exists, produce an error.
   b) If Doc Type equals 'R' and Phase Cd does not exist, validate against the SERVICE_ORDER table.
   c) If Doc Type does not equal 'M' or 'R' and Phase Cd does not exist, produce an error.
   d) If Doc Type equals 'M' and Phase Cd does not exist, validate against REQ_FOR_WORK.
   e) If Doc Type does not equal 'R' and Phase Cd exists, validate against WORK_PH.
3) If Expensed Amount exists, process Rolled-up Costs (see **Cost File Validations - Rolled-up Costs** below).
4) If Document Number does not exist, Labor Hours exist, and Expensed Amount does not exist, process Overhead Labor (see **Cost File Validations - Overhead Labor** below).
5) If Document Number exists, Labor Hours exist, Military Pay Grade exists, and Expensed Amount does not exist, process Military Labor (see **Cost File Validations - Military Labor** below).
6) If Document Number exists, Labor Hours exist, Military Pay Grade does not exist, and Expensed Amount does not exist, process Non-Military Labor (see **Cost File Validations - Non-Military Labor** below).
7) If Document Number exists, MS Equipment Id exists, MS Equipment Hours exist, and Expensed Amount does not exist, process Equipment (see **Cost File Validations – Equipment** below)
8) Any records not meeting at least one of the above checks will be rejected with the error, 'Transaction Type Unknown'.
9) **AKJR61.pc** – fix existing problem by increasing OSCommand from 129 to 200 for the function CheckFileExists.

e. **Cost File Validations**
   1) **Rolled Up Costs**
      a) Validate the Cost File transaction as follows:

Field	Edits/Comments
Shop Code	Mandatory. Validate against SHOP table with SHOP_INACTIVE_IND equal 'A'.
Work Date	Optional. Must be in date format DD-MON-YY.
Employee No	Optional. Validate against EMPLOYEE table with EMPLOYEE_INACTIVE_IND equal 'A'.
Date Time	Ignore.
Add/Subtract Ind	Mandatory. Must be 'A' or 'S'.
Customer Id	Mandatory. Previously validated.
Doc Ser No	Mandatory. Previously validated.
FY	Mandatory. Previously validated.
Doc Type	Mandatory. Previously validated.
Phase Cd	Mandatory if Doc Type does not equal 'R'. Previously validated.
Work Status Cd	Optional. Validate against WORK_STATUS table.
Req Installation No	Mandatory. Previously validated.
RPF Installation No	Ignore.
Facility No	Ignore.
RPF Partition No	Ignore.
Fam Housing Qtrs No	Ignore.
RPF Equipment Id	Ignore.
Design Use Category Cd	Ignore.
Component Cd	Ignore.
Task Cd	Optional. If present, validate against TASK table with TASK_INACTIVE_IND equal 'A'.
Task Unit	Mandatory if Task Cd exists. Must be numeric. If Task Cd does not exist, ignore.
Military Pay Grade	If Tech Data Cost Elm Cd equals '2', validate against MIL_PAY table. Otherwise, ignore.
Type Labor Cd	Mandatory if Tech Data Cost Elm Cd equals '1'. Must be 'RT' or 'OT'. If Tech Data Cost Elm Cd does not equal '1', ignore.
Labor Hours/Tenths	Optional if Tech Data Cost Elm Cd equals '1', '2', or '3'. Must be numeric and within range .1 to 999.9. If Tech Data Cost Elm Cd does not equal '1', '2', or '3', ignore.
Tech Data Cost Elm Cd	Mandatory. Must be equal: '1' – Civilian Labor '2' – Military Labor '3' – Contract Cost '4' – Contract Fuel '5' – Equipment Cost '7' – Material Cost '8' – Supply Fuel '9' – Other Cost
Expensed Amt	Will exist. Must be numeric and within range .01 to 9,999,999.99. NOTE: The file only allows for 10 positions, which, with decimals, would be a maximum value of 9,999,999.99.
Trans Date	Ignore.
MS Equipment Id	Ignore.
Equip Hrs/Tenths	Ignore.
Elm Resource Name	Optional. Validate or ignore as follows: '1' – CIV-LAB '2' – ignore '3' – CA-CONT '4' – CA-CONT '5' – EQ-RENT '7' – SUP-OTH '8' – SUP-OTH '9' – ignore

b) Create the Work Phase Audit transaction for the Rolled-up Cost (see **Work Phase Audit Creation – Rolled-up Cost** below).

c) Perform post audit creation updates as detailed below (see **Post Work Phase Audit Creation Processing** below).

2) **Overhead Labor**

a) Validate the Cost File transaction as follows:

Field	Edits/Comments
Shop Code	Mandatory. Validate against SHOP table with SHOP_INACTIVE_IND equal 'A'.
Work Date	Mandatory. Must be in date format DD-MON-YY.
Employee No	Optional. Validate against EMPLOYEE table with EMPLOYEE_INACTIVE_IND equal 'A'.
Date Time	Ignore.
Add/Subtract Ind	Mandatory. Must be 'A' or 'S'.
Customer Id	Will not exist.
Doc Ser No	Will not exist.
FY	Will not exist.
Doc Type	Will not exist.
Phase Cd	Ignore.
Work Status Cd	Ignore.
Req Installation No	Will not exist.
RPF Installation No	Ignore.
Facility No	Ignore.
RPF Partition No	Ignore.
Fam Housing Qtrs No	Ignore.
RPF Equipment Id	Ignore.
Design Use Category Cd	Ignore.
Component Cd	Ignore.
Task Cd	Ignore.
Task Unit	Ignore.
Military Pay Grade	Ignore.
Type Labor Cd	Mandatory. Validate against TYPE_LAB table with TYPE_LAB_INACTIVE_IND equal 'A'. Cannot equal 'RT' or 'OT'.
Labor Hours/Tenths	Mandatory. Must be numeric and within range .1 to 999.9.
Tech Data Cost Elm Cd	Ignore.
Expensed Amt	Ignore.
Trans Date	Ignore.
MS Equipment Id	Ignore.
Equip Hrs/Tenths	Ignore.
Elm Resource Name	Ignore.

b) Create an Overhead Labor Work Phase Audit transaction (see **Work Phase Audit Creation - Overhead Labor** below).

3) **Military Labor**
   a) Validate the Cost File transaction as follows:

Field	Edits/Comments
Shop Code	Mandatory. Validate against SHOP table with SHOP_INACTIVE_IND equal 'A'.
Work Date	Mandatory. Must be in date format DD-MON-YY.
Employee No	Optional. Validate against EMPLOYEE table with EMPLOYEE_INACTIVE_IND equal 'A'.
Date Time	Ignore.
Add/Subtract Ind	Mandatory. Must be 'A' or 'S'.
Customer Id	Previously validated.
Doc Ser No	Previously validated.
FY	Previously validated.
Doc Type	Previously validated.
Phase Cd	Previously validated.
Work Status Cd	Optional. Validate against WORK_STATUS table.
Req Installation No	Previously validated.
RPF Installation No	Mandatory if Doc Type equals 'M' and Phase Cd does not exist. Otherwise, ignore.
Facility No	Mandatory if Doc Type equals 'M' and Phase Cd does not exist. Otherwise, ignore. If present, validate against REAL_PROPERTY_FACILI where RPF Reportability Code equals blank or 'N', using RPF Instl No.
RPF Partition No	If RPF Instl No and Facility No are mandatory, at least one RP data element (Partition, FHQ, Equip, or Design Use) must exist. Partition cannot exist on the same transaction as FHQ or Equip. If Partition is allowed and exists, validate against RPF_PARTITION table, using RPF Instl No, Facility No, and Design Use Category Code (if it exists).
Fam Housing Qtrs No	If RPF Instl No and Facility No are mandatory, at least one RP data element (Partition, FHQ, Equip, or Design Use) must exist. FHQ cannot ex on the same transaction as Partition or Equip. If FHQ is allowed and exists, validate against FAMILY_HOUSING_QUARTERS table, using RPF Instl No, Facility No, and Design Use Category Code (if it exists).
RPF Equipment Id	If RPF Instl No and Facility No are mandatory, at least one RP data element (Partition, FHQ, Equip, or Design Use) must exist. Equip cannot exist on the same transaction as Partition or FHQ. If Equip is allowed and exists, validate against RPF_EQUIPMENT table, using RPF Instl No and Facility No.
Design Use Category Cd	If RPF Instl No and Facility No are mandatory, at least one RP data element (Partition, FHQ, Equip, or Design Use) must exist. If Design Use exists, validate against RPF_USE table using RPF Instl No and Facility No (if not already validated with the Partition or FHQ).
Component Cd	Optional. If Doc Type equals 'M' and Phase Cd does not exist, validate against COMPONENT table. Otherwise, ignore.
Task Cd	Mandatory if Doc Type equals 'R' and environmental variable $TASK_CODE_REQUIRED equals 'Y'. Otherwise, Task Cd is optional. If present, validate against TASK table with TASK_INACTIVE_IND equal 'A'.
Task Unit	Mandatory if Task Cd exists. Must be numeric. If Task Cd does not exist, ignore.
Military Pay Grade	Will exist. Validate against MIL_PAY table.
Type Labor Cd	Ignore.
Labor Hours/Tenths	Mandatory. Must be numeric and within range .1 to 999.9.
Tech Data Cost Elm Cd	Ignore.
Expensed Amt	Will not exist.
Trans Date	Ignore.
MS Equipment Id	Optional. Validate against MS_EQUIP table with MS_EQUIP_INACTIVE_IND equal 'A'.
Equip Hrs/Tenths	Mandatory if MS Equip Id exists. Must be numeric and within range .1 to 999.9. If MS Equip Id does not exist, ignore.
Elm Resource Name	Ignore.

b) If Doc Type equals 'M' and Phase Cd does not exist, create a Work Phase record (see **Work Phase Creation Processing** below).

c) Create a Military Labor Work Phase Audit transaction (see **Work Phase Audit Creation - Military Labor** below).

d) If Document Type equals 'R' or 'M', create a Shop Stock Work Phase Audit transaction (see **Work Phase Audit Creation - Shop Stock** below).

e) Perform post audit creation updates as detailed below (see **Post Work Phase Audit Creation Processing** below).

4) **Non-Military Labor**

a) Validate the Cost File transaction as follows:

Field	Edits/Comments
Shop Code	Mandatory. Validate against SHOP table with SHOP_INACTIVE_IND equal 'A'.
Work Date	Mandatory. Must be in date format DD-MON-YY.
Employee No	Optional. Validate against EMPLOYEE table with EMPLOYEE_INACTIVE_IND equal 'A'.
Date Time	Ignore.
Add/Subtract Ind	Mandatory. Must be 'A' or 'S'.
Customer Id	Previously validated.
Doc Ser No	Previously validated.
FY	Previously validated.
Doc Type	Previously validated.
Phase Cd	Previously validated.
Work Status Cd	Optional. Validate against WORK_STATUS table.
Req Installation No	Previously validated.
RPF Installation No	Mandatory if Doc Type equals 'M' and Phase Cd does not exist. Otherwise, ignore.
Facility No	Mandatory if Doc Type equals 'M' and Phase Cd does not exist. Otherwise, ignore. If present, validate against REAL_PROPERTY_FACILI where RPF Reportability Code equals blank or 'N', using RPF Instl No.
RPF Partition No	If RPF Instl No and Facility No are mandatory, at least one RP data element (Partition, FHQ, Equip, or Design Use) must exist. Partition cannot exist on the same transaction as FHQ or Equip. If Partition is allowed and exists, validate against RPF_PARTITION table, using RPF Instl No, Facility No, and Design Use Category Code (if it exists).
Fam Housing Qtrs No	If RPF Instl No and Facility No are mandatory, at least one RP data element (Partition, FHQ, Equip, or Design Use) must exist. FHQ cannot exist on the same transaction as Partition or Equip. If FHQ is allowed and exists, validate against FAMILY_HOUSING_QUARTERS table, using RPF Instl No, Facility No, and Design Use Category Code (if it exists).
RPF Equipment Id	If RPF Instl No and Facility No are mandatory, at least one RP data element (Partition, FHQ, Equip, or Design Use) must exist. Equip cannot exist on the same transaction as Partition or FHQ. If Equip is allowed and exists, validate against RPF_EQUIPMENT table, using RPF Instl No and Facility No.
Design Use Category Cd	If RPF Instl No and Facility No are mandatory, at least one RP data element (Partition, FHQ, Equip, or Design Use) must exist. If Design Use exists, validate against RPF_USE table using RPF Instl No and Facility No (if not already validated with the Partition or FHQ).
Component Cd	Optional. If Doc Type equals 'M' and Phase Cd does not exist, validate against COMPONENT table. Otherwise, ignore.
Task Cd	Mandatory if Doc Type equals 'R' and environmental variable $TASK_CODE_REQUIRED equals 'Y'. Otherwise, Task Cd is optional. If present, validate against TASK table with TASK_INACTIVE_IND equal 'A'.
Task Unit	Mandatory if Task Cd exists. Must be numeric. If Task Cd does not exist, ignore.
Military Pay Grade	Will not exist.
Type Labor Cd	Mandatory. Must be 'RT' or 'OT'.
Labor Hours/Tenths	Mandatory. Must be numeric and within range .1 to 999.9.

Field	Edits/Comments
Tech Data Cost Elm Cd	Ignore.
Expensed Amt	Will not exist.
Trans Date	Ignore.
MS Equipment Id	Optional. Validate against MS_EQUIP table with MS_EQUIP_INACTIVE_IND equal 'A'.
Equip Hrs/Tenths	Mandatory if MS Equip Id exists. Must be numeric and within range .1 to 999.9. If MS Equip Id does not exist, ignore.
Elm Resource Name	Ignore.

b) If Doc Type equals 'M' and Phase Cd does not exist, create a Work Phase record (see **Work Phase Creation Processing** below).

c) Create a Non-Military Labor Work Phase Audit transaction (see **Work Phase Audit Creation – Non-Military Labor** below).

d) If Document Type equals 'R' or 'M', create a Shop Stock Work Phase Audit transaction (see **Work Phase Audit Creation - Shop Stock** below).

e) Perform post audit creation updates as detailed below (see **Post Work Phase Audit Creation Processing** below).

5) **Equipment**
   a) Validate the Cost File transaction as follows:

Field	Edits/Comments
Shop Code	Mandatory. Validate against SHOP table with SHOP_INACTIVE_IND equal 'A'.
Work Date	Mandatory. Must be in date format DD-MON-YY.
Employee No	Ignore.
Date Time	Ignore.
Add/Subtract Ind	Mandatory. Must be 'A' or 'S'.
Customer Id	Mandatory. Previously validated.
Doc Ser No	Mandatory. Previously validated.
FY	Mandatory. Previously validated.
Doc Type	Mandatory. Previously validated.
Phase Cd	Conditional. Previously validated.
Work Status Cd	Optional. Validate against WORK_STATUS table.
Req Installation No	Mandatory. Previously validated.
RPF Installation No	Mandatory if Doc Type equals 'M' and Phase Cd does not exist. Otherwise, ignore.
Facility No	Mandatory if Doc Type equals 'M' and Phase Cd does not exist. Otherwise, ignore. If present, validate against REAL_PROPERTY_FACILI where RPF Reportability Code equals blank or 'N', using RPF Instl No.
RPF Partition No	If RPF Instl No and Facility No are mandatory, at least one RP data element (Partition, FHQ, Equip, or Design Use) must exist. Partition cannot exist on the same transaction as FHQ or Equip. If Partition is allowed and exists, validate against RPF_PARTITION table, using RPF Instl No, Facility No, and Design Use Category Code (if it exists).
Fam Housing Qtrs No	If RPF Instl No and Facility No are mandatory, at least one RP data element (Partition, FHQ, Equip, or Design Use) must exist. FHQ cannot ex on the same transaction as Partition or Equip. If FHQ is allowed and exists, validate against FAMILY_HOUSING_QUARTERS table, using RPF Instl No, Facility No, and Design Use Category Code (if it exists).
RPF Equipment Id	If RPF Instl No and Facility No are mandatory, at least one RP data element (Partition, FHQ, Equip, or Design Use) must exist. Equip cannot exist on the same transaction as Partition or FHQ. If Equip is allowed and exists, validate against RPF_EQUIPMENT table, using RPF Instl No and Facility No.
Design Use Category Cd	If RPF Instl No and Facility No are mandatory, at least one RP data element (Partition, FHQ, Equip, or Design Use) must exist. If Design Use exists, validate against RPF_USE table using RPF Instl No and Facility No (if not already validated with the Partition or FHQ).
Component Cd	Optional. If Doc Type equals 'M' and Phase Cd does not exist, validate

	against COMPONENT table. Otherwise, ignore.
Task Cd	Ignore.
Task Unit	Ignore.
Military Pay Grade	Ignore.
Type Labor Cd	Ignore.
Labor Hours/Tenths	Ignore.
Tech Data Cost Elm Cd	Ignore.
Expensed Amt	Will not exist.
Trans Date	Ignore.
MS Equipment Id	Will exist. Validate against MS_EQUIP table with MS_EQUIP_INACTIVE_IND equal 'A'.
Equip Hrs/Tenths	Will exist. Must be numeric and within range .1 to 999.9.
Elm Resource Name	Ignore.

b) If Doc Type equals 'M' and Phase Cd does not exist, create a Work Phase record (see **Work Phase Creation Processing** below).

c) Create an Equipment Work Phase Audit transaction (see **Work Phase Audit Creation – Equipment** below).

d) Perform post audit creation updates as detailed below (see **Post Work Phase Audit Creation Processing** below).

f. **Work Phase Audit Creation**
1) When building WORK_PH_AUD records, the following columns will always be null:
   APC, APC_DERIV_SN, CONTR_PAY_REQ_NO, CREDIT_ELM_RESOURCE_NO, CREDIT_ELM_RESOURCE_SN, DEBIT_ELM_RESOURCE_NO, DEBIT_ELM_RESOURCE_SN, WORK_PH_AUD_POST_DATE, WORK_PH_AUD_SUPPLY_DOC_NO, WORK_PH_AUD_TRANS_CNTL_NO, TECH_DATA_ACTV_CD, CC_VENDOR_CD, CC_ID, DISTR_ID, CHARGE_ID

2) **Rolled-up Cost**
   a) Populate attributes on the WORK_PH_AUD as follows:

Column	Value/Comments
DOC_ID_NO	From Cost File
ELM_RESOURCE_NAME	If REQ_FOR_WORK_INTERFACE_IND on REQ_FOR_WORK or SERVICE_ORDER equals 'N', or EMPLOYEE_INTERFACE_IND on EMPLOYEE equals 'N', set to null. Otherwise, set to the value from the C File if it was passed.
EMPLOYEE_NO	From Cost File
MIL_PAY_GRADE	From Cost File if TDCE equals '2'. Otherwise, set to null.
MS_EQUIP_ID	Null
PH_CD	From Cost File
SHOP_CD	From Cost File
TASK_CD	From Cost File
TECH_DATA_COST_ELM_CD	From Cost File
TYPE_LAB_CD	From Cost File if TDCE equals '1'. Otherwise, set to null.
WORK_PH_AUD_ERROR_ POOL_IND	U
WORK_PH_AUD_EXP_AMT	From Cost File. If Add/Subtract Ind equals 'S', multiply by –1.
WORK_PH_AUD_EXP_HR	From Cost File Labor Hours if TDCE equals '1', '2', or '3'. Otherwise, set to null. If exists and Add/Subtract Ind equals ' multiply by –1.
WORK_PH_AUD_FUND_ UNFUND_IND	If TDCE equals '2', set to 'U'. Otherwise, set to 'F'.
WORK_PH_AUD_OBLG_AMT	Same as WORK_PH_AUD_EXP_AMT
WORK_PH_AUD_OBLG_HR	Same as WORK_PH_AUD_EXP_HR
WORK_PH_AUD_TASK_UNIT	From Cost File if Task Cd exists. If Add/Subtract Ind equals multiply by –1.
WORK_PH_AUD_TRANS_DATE	System Date (without time)
WORK_PH_AUD_WORK_DATE	From Cost File

3) **Overhead Labor**
   a) Populate attributes on the WORK_PH_AUD as follows:

Column	Value/Comments
DOC_ID_NO	Null
ELM_RESOURCE_NAME	Null
EMPLOYEE_NO	From Cost File
MIL_PAY_GRADE	Null
MS_EQUIP_ID	Null
PH_CD	Null
SHOP_CD	From Cost File
TASK_CD	Null
TECH_DATA_COST_ELM_CD	If CA_IND on SHOP table equals 'N', set to '1'. If CA_IND equals 'Y', set to '3'.
TYPE_LAB_CD	From Cost File
WORK_PH_AUD_ERROR_ POOL_IND	P
WORK_PH_AUD_EXP_AMT	Null
WORK_PH_AUD_EXP_HR	From Cost File Labor Hours. If Add/Subtract Ind equals 'S', multiply by –1.
WORK_PH_AUD_FUND_ UNFUND_IND	F
WORK_PH_AUD_OBLG_AMT	Null
WORK_PH_AUD_OBLG_HR	Same as WORK_PH_AUD_EXP_HR
WORK_PH_AUD_TASK_UNIT	Null
WORK_PH_AUD_TRANS_DATE	System Date (without time)
WORK_PH_AUD_WORK_DATE	From Cost File

4) **Military Labor**

a) Populate attributes on the WORK_PH_AUD as follows:

Column	Value/Comments
DOC_ID_NO	From Cost File
ELM_RESOURCE_NAME	Null
EMPLOYEE_NO	From Cost File
MIL_PAY_GRADE	From Cost File
MS_EQUIP_ID	Null
PH_CD	From Cost File or passed from **Work Phase Locator/Creation Process**
SHOP_CD	From Cost File
TASK_CD	From Cost File
TECH_DATA_COST_ELM_CD	2
TYPE_LAB_CD	Null
WORK_PH_AUD_ERROR_ POOL_IND	U
WORK_PH_AUD_EXP_AMT	Multiply MIL_PAY_RATE by WORK_PH_AUD_EXP_HR. If Add/Subtract Ind equals 'S', multiply by –1.
WORK_PH_AUD_EXP_HR	From Cost File Labor Hours. If Add/Subtract Ind equals 'S', multiply by –1.
WORK_PH_AUD_FUND_ UNFUND_IND	U
WORK_PH_AUD_OBLG_AMT	Same as WORK_PH_AUD_EXP_AMT
WORK_PH_AUD_OBLG_HR	Same as WORK_PH_AUD_EXP_HR
WORK_PH_AUD_TASK_UNIT	From Cost File if Task Cd exists. If Add/Subtract Ind equals multiply by –1.
WORK_PH_AUD_TRANS_DATE	System Date (without time)
WORK_PH_AUD_WORK_DATE	From Cost File

5) **Non-Military Labor**
   a) Populate attributes on the WORK_PH_AUD as follows:

Column	Value/Comments
DOC_ID_NO	From Cost File
ELM_RESOURCE_NAME	If REQ_FOR_WORK_INTERFACE_IND on REQ_FOR_WORK or SERVICE_ORDER equals 'N', or EMPLOYEE_INTERFACE_IND on EMPLOYEE equals 'N', set to null. Otherwise, if CA_IND on SHOP table for the Shop Code on the Cost File equals 'N', set to 'CIV-LAB'. If CA_IND on SHOP table for the Shop Code on the Cost File equals 'Y', set to 'CA-CONT'.
EMPLOYEE_NO	From Cost File
MIL_PAY_GRADE	Null
MS_EQUIP_ID	Null
PH_CD	From Cost File or passed from **Work Phase Locator/Creation Process**
SHOP_CD	From Cost File
TASK_CD	From Cost File
TECH_DATA_COST_ELM_CD	If CA_IND on SHOP table for the Shop Code on the Cost File equals 'N', set to '1'. If CA_IND on SHOP table for the Shop Code on the Cost File equals 'Y', set to '3'.
TYPE_LAB_CD	From Cost File
WORK_PH_AUD_ERROR_ POOL_IND	U
WORK_PH_AUD_EXP_AMT	If Employee exists, use the Shop Code from the Employee table; otherwise, use the Shop Code on the Cost File. Multiply SHOP_LAB_RATE_EFF_AMT for the appropriate Shop Code by WORK_PH_AUD_EXP_HR. If Add/Subtract Ind equals 'S', multiply by –1.
WORK_PH_AUD_EXP_HR	From Cost File Labor Hours. If Add/Subtract Ind equals 'S', multiply by –1.
WORK_PH_AUD_FUND_ UNFUND_IND	F

WORK_PH_AUD_OBLG_AMT	Same as WORK_PH_AUD_EXP_AMT
WORK_PH_AUD_OBLG_HR	Same as WORK_PH_AUD_EXP_HR
WORK_PH_AUD_TASK_UNIT	From Cost File if Task Cd exists. If Add/Subtract Ind equals multiply by –1.
WORK_PH_AUD_TRANS_DATE	System Date (without time)
WORK_PH_AUD_WORK_DATE	From Cost File

6) **Shop Stock**
   a) Populate attributes on the WORK_PH_AUD as follows:

Column	Value/Comments
DOC_ID_NO	From Cost File
ELM_RESOURCE_NAME	If REQ_FOR_WORK_INTERFACE_IND on REQ_FOR_WORK or SERVICE_ORDER equals 'N', set to null. Otherwise, if SHOP_MATL_IND on SHOP table for the Shop Code on the Cost File equals 'G', set to 'SHP-STK'. If SHOP_MATL_IND on SHOP table for the Shop Code on the Cost File equals 'C', set to 'CA-CONT'.
EMPLOYEE_NO	Null
MIL_PAY_GRADE	Null
MS_EQUIP_ID	Null
PH_CD	From Cost File or passed from **Work Phase Locator/Creation Process**
SHOP_CD	From Cost File
TASK_CD	Null
TECH_DATA_COST_ELM_CD	If SHOP_MATL_IND on SHOP table for the Shop Code on the Cost File equals 'G', set to '7'. If SHOP_MATL_IND on SHOP table for the Shop Code on the Cost File equals 'C', set to '3'.
TYPE_LAB_CD	Null
WORK_PH_AUD_ERROR_ POOL_IND	U
WORK_PH_AUD_EXP_AMT	Multiply SHOP_STOCK_RATE for the Shop Code on the Cost File by WORK_PH_AUD_EXP_HR. If Add/Subtract Ind equals 'S', multiply by –1.
WORK_PH_AUD_EXP_HR	From Cost File Labor Hours. If Add/Subtract Ind equals 'S', multiply by –1.
WORK_PH_AUD_FUND_ UNFUND_IND	F
WORK_PH_AUD_OBLG_AMT	Same as WORK_PH_AUD_EXP_AMT
WORK_PH_AUD_OBLG_HR	Same as WORK_PH_AUD_EXP_HR
WORK_PH_AUD_TASK_UNIT	Null
WORK_PH_AUD_TRANS_DATE	System Date (without time)
WORK_PH_AUD_WORK_DATE	From Cost File

7) **Equipment**
a) Populate attributes on the WORK_PH_AUD as follows:

Column	Value/Comments
DOC_ID_NO	From Cost File
ELM_RESOURCE_NAME	If REQ_FOR_WORK_INTERFACE_IND on REQ_FOR_WORK or SERVICE_ORDER equals 'N', set to null. Otherwise, if MS_EQUIP_IND on MS_EQUIP table equals 'G' or 'L', set to 'EQ-RENT'. If MS_EQUIP_IND on MS_EQUIP table equals 'C', set to 'CA-CONT'.
EMPLOYEE_NO	Null
MIL_PAY_GRADE	Null
MS_EQUIP_ID	From Cost File
PH_CD	From Cost File or passed from **Work Phase Locator/Creation Process**
SHOP_CD	From Cost File
TASK_CD	Null
TECH_DATA_COST_ELM_CD	If MS_EQUIP_IND on MS_EQUIP table equals 'G' or 'L', set to '5'. If MS_EQUIP_IND on MS_EQUIP table equals 'C', set to '3'.
TYPE_LAB_CD	Null
WORK_PH_AUD_ERROR_POOL_IND	U
WORK_PH_AUD_EXP_AMT	Multiply MS_EQUIP_RNTL_RATE by WORK_PH_AUD_EXP_HR. If Add/Subtract Ind equals 'S', multiply by –1.
WORK_PH_AUD_EXP_HR	From Cost File Equip Hours. If Add/Subtract Ind equals 'S', multiply by –1.
WORK_PH_AUD_FUND_UNFUND_IND	F
WORK_PH_AUD_OBLG_AMT	Same as WORK_PH_AUD_EXP_AMT
WORK_PH_AUD_OBLG_HR	Same as WORK_PH_AUD_EXP_HR
WORK_PH_AUD_TASK_UNIT	Null
WORK_PH_AUD_TRANS_DATE	System Date (without time)
WORK_PH_AUD_WORK_DATE	From Cost File

g. **Post Work Phase Audit Creation Processing**
   1) Following the creation of a WORK_PH_AUD record, the following should be performed:
      a) If Doc Type equals 'R', the Work Status Cd on the cost file does not equal the Current Work Status for the Service Order, the Current Work Status does not equal 'CMP', 'CAN', or 'DIS', and the Work Date on the Service Order is null or less than or equal to the Work Date on the cost file, create an SO_WORK_STATUS record using the Work Status Cd and Work Date from the cost file. (NOTE: If the Work Status Cd on the cost file is null, perform processing as if 'CMP' was passed on the cost file.) If an SO_WORK_STATUS record is created, update the Current Work Status Code and Current Work Status Date (with time) on the SERVICE_ORDER table.
      b) Depending upon Doc Type, set the ACTUAL_COST_IND to 'Y' on the SERVICE_ORDER or the REQ_FOR_WORK and WORK_PH tables.
      c) Depending upon Doc Type, set the MODIFICATION_DATE to the system date with time on SERVICE_ORDER or REQ_FOR_WORK.
      d) Depending upon Doc Type, set the DATE_LAST_WORKED on SERVICE_ORDER or REQ_FOR_WORK.to the Work Date from the cost file as long as the Work Date is greater than the DATE_LAST_WORKED on the SERVICE_ORDER or REQ_FOR_WORK.
      e) If Doc Type does not equal 'R' and Work Status Cd equals 'CMP', set Work Phase Completed Date on the Work Phase table to the Work Date from the Cost File as long as the Work Date is greater than the Work Phase Completed Date. If Work Status Cd does not equal 'CMP', set the Work Phase Completed Date to null.

h. **Work Phase Locator/Creation Process**
   1) Attempt to locate an existing Work Phase record by matching against RPF Installation Number, Facility Number, RPF Partition, RPF Equipment, Family Housing Quarters, Design Use Category Code, Component Code, and Shop Code. If a match is found, retrieve the Phase Code and pass it to the Work Phase Audit Creation Process. If more than one matching Work Phase is found, retrieve the maximum Phase Code.
   2) If an existing Work Phase record is not found, create a new Work Phase record as follows:
      a) Set Phase Code equal to the maximum numeric Phase Code for the Document plus one. If the maximum numeric Phase Code equals '999', the new Work Phase cannot be created. Issue the message '999 Phase Code exists – cannot create new Work Phase.'.
      b) Set Workclass Code to 'K'.
      c) Set Work Phase Description to 'Unscheduled PM'.
      d) Set Actual Cost Ind to 'Y'.
      e) Set Trans Ind to 'A'.
      f) If the Customer Routine Reimbursable Ind for the Requester Customer Id equals 'A' or 'B', set the Reimbursable Customer Id equal to the Requester Customer Id.
      g) Set the Work Sequence Number to the maximum Work Sequence Number for the Document plus one.
      h) Set the following fields to the values passed on the Cost File:
         (a) Requester Installation Number
         (b) Customer Id
         (c) Document Serial Number
         (d) FY
         (e) Document Type
         (f) Document Number – the 5 parts of the key concatenated
         (g) RPF Installation Number
         (h) Facility Number
         (i) Design Use Category Code
         (j) Family Housing Quarters Number
         (k) RPF Partition Number
         (l) RPF Equipment Id

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(m) Component Code
(n) Shop Code

i. **Cost Error Correction Screen (akjsmp.fmb) (new)**

1) Screen will allow correction of error transactions from the COSTFILE. Update/correction of all fields will be allowed. Whenever a record is modified, the Error Date, Error Number, and Error Message will be cleared.
2) The screen will contain a button called *Cost File Interface* that will invoke the Cost File Process.
3) Very few combinations or complex edits will be included on this screen since the Cost File Process will perform those edits.
4) List of Values will be included where possible.
5) The following fields will be included on this screen:
   a) Error Number – display-only.
   b) Error Date – display-only.
   c) Employee Number – optional; validate against EMPLOYEE table where Employee Inactive Ind equals 'A'.
   d) Shop Code – mandatory; validate against SHOP table where Shop Inactive Ind equals 'A'.
   e) Work Date – mandatory if Labor Hours or Equipment Hours exist; must be valid date.
   f) Add/Subtract Ind – mandatory; must equal 'A' or 'S'.

g) Document Number and Phase Code – optional; validation of Document Number/Phase Code is as follows:
   (a) If any parts of the Document Number exist, but not all parts exist, produce an error.
   (b) If the Document Number exists, validate as follows:
       (i) If Doc Type equals 'R' and Phase Cd exists, produce an error.
       (ii) If Doc Type equals 'R' and Phase Cd does not exist, validate against the SERVICE_ORDER table.
       (iii) If Doc Type does not equal 'M' or 'R' and Phase Cd does not exist, produce an error.
       (iv) If Doc Type equals 'M' and Phase Cd does not exist, validate against REQ_FOR_WORK.
       (v) If Doc Type does not equal 'R' and Phase Cd exists, validate against WORK_PH.
h) Work Status Code – optional; validate against WORK_STATUS_ACTION.
i) RPF Installation Number and Facility Number – optional; validate against REAL_PROPERTY_FACILITY where RPF Reportability Code equals blank or 'N'.
j) RPF Partition Number – optional; validate against RPF_PARTITION using RPF Installation Number, Facility Number, and Design Use Category Code (if it exists). If RPF Partition Number is entered, retrieve and populate the Design Use Category Code.
k) Family Housing Quarters Number – optional; validate against FAMILY_HOUSING_QUARTERS using RPF Installation Number, Facility Number, and Design Use Category Code (if it exists). If Family Housing Quarters Number is entered, retrieve and populate the Design Use Category Code.
l) RPF Equipment Id – optional; validate against RPF_EQUIPMENT using RPF Installation Number and Facility Number. If RPF Equipment Id is entered, retrieve and populate the Design Use Category Code as follows:
   (a) If the Equipment Housing Class Code is null and the Equipment Installed Inplace Ind equals 'I', retrieve the Design Use Category Code from the matching RPF_USE record containing a Facility Usage Code of 'B' if one exists. Otherwise, use the Design Use Category Code for a single-use facility, or use the DPAS primary use logic to determine the primary use for a multi-use facility.
   (b) If the Equipment Housing Class Code is not null or the Equipment Installed Inplace Ind does not equal 'I', use the Design Use Category Code for a single-use facility, or use the DPAS primary use logic to determine the primary use for a multi-use facility.
m) Design Use Category Code – optional; validate against RPF_USE using RPF Installation Number and Facility Number (if not previously validated with Partition or FHQ).
n) Component Code – optional; validate against COMPONENT.
o) Task Code – optional; validate against TASK where Task Inactive Ind equals 'A'.
p) Task Unit – mandatory if Task Code exists; otherwise, not allowed; must be numeric.
q) Military Pay Grade – optional; validate against MIL_PAY.
r) Type Labor Code –optional; validate against TYPE_LAB where Type Labor Inactive Ind equals 'A'.
s) Labor Hours/Tenths – optional; must be numeric and within range .1 to 999.9.
t) MS Equipment Id – optional; validate against MS_EQUIP where MS Equipment Inactive Ind equals 'A'.
u) Equipment Hours/Tenths – mandatory if MS Equipment Id exists; otherwise, not allowed; must be numeric and within range .1 to 999.9.
v) Tech Data Cost Elm Cd – optional; must equal '1', '2', '3', '4', '5', '7', '8', or '9'.
w) Expensed Amount – optional; must be numeric and within range .01 to 9,999,999.99.
x) Elm Resource Name – optional; validate against ELM.
y) Error Message – display-only.

j. **Labor & Equipment Screen (akjdrp.fmb)**
   1) Allow any valid Shop Code; no longer necessary to match against Work Phase.
   2) Change the setting of Elm Resource Name for SHP-STK. If the RFW Interface Ind on REQ_FOR_WORK or SERVICE_ORDER equals 'N', set to null. Otherwise, if the Shop Matl Ind on SHOP table equals 'G', set to 'SHP-STK'. If the Shop Matl Ind on SHOP table equals 'C', set to 'CA-CONT'. It is no longer necessary to check FIN_INTFC when setting the Elm Resource Name for Shop Stock records.
   3) Allow Type Labor Code of 'RT' or 'OT' if CA Ind for the Shop Code equals 'Y'.
   4) No longer build Equipment Depreciation Work Phase Audit records.
   5) For Document Type 'R' or 'M', Task Code is mandatory if $TASK_CODE_REQUIRED equals 'Y'. Otherwise, Task Code is optional.
   6) Existing problem – needs a 'When too many rows' exception handler. Create a PM type work request; commit. Enter an L&E for the PM job without entering a Phase Code; commit. If the lookup for a phase returns more than one row, a form error will be raised.

k. **Equipment Only Screen (akjdtp.fmb)**
   1) Allow any valid Shop Code; no longer necessary to match against Work Phase.
   2) No longer build Equipment Depreciation Work Phase Audit records.

l. **End-of-Day (akjvvp.sh, akjqxp.sh, akjcqp.sh, akjdxp.sh)**
   1) Remove the L&E Process (akjmrp.sh) from End-of-Day.

m. **System Management (AKJR00.sh)**
   1) Add an option to ifsmsm for 'Task Code Utilization'. This option will allow the SA to update the environmental variable $TASK_CODE_REQUIRED to identify whether Task Codes should be mandatory or optional for all Labor transactions against Service Orders or Preventive Maintenance jobs (document type = 'R' or 'M').